

CLAIMS

What is claimed is:

1. Switchable assembly bearing (1) with hydraulic damping, particularly for supporting drive assemblies and/or gearbox assemblies in motor vehicles, comprising at least one working chamber (10) and one compensation chamber (20) that are separated from one another by a dividing wall (50), but are hydraulically interconnected through a damping channel (60), and at least one additional damping channel (70) that can be closed by means of a shut-off body displaceable along a displacement path, said shut-off body being capable of providing sealing by contact with an associated seat, characterized in that the additional damping channel is configured and disposed relative to the symmetry axis of the bearing so that the forces acting on the shut-off body through the hydraulic liquid counterbalance each other.

2. Switchable assembly bearing (1) according to Claim 1, characterized in that the damping channel (70) forms an aperture between the working chamber (10) and the compensation chamber (20) in the form of a radially surrounding annular slot with a passage opening disposed radially relative to the symmetry axis and directed toward compensation chamber (20), and that the shut-off body (90) is formed by a sealing ring disposed at this passage opening and displaceable along a displacement path that extends vertical to the passage opening between an open position and a closed position.

3. Switchable assembly bearing (1) according to Claim 2, characterized in that the passage opening points radially outward.

4. Switchable assembly bearing (1) according to one of Claims 1 to 3, characterized in that the shut-off body or sealing ring (90) comprises a permanently magnetic material and that there is provided a device for actuating the shut-off body or sealing ring (90) by magnetic forces.

5. Switchable assembly bearing (1) according to Claim 4, characterized in that the device for actuating the shut-off body or sealing ring (90) is an electromagnet (100).

6. Switchable assembly bearing (1) according to Claim 5, characterized in that in correspondence to the sealing ring (90) at least segments of the electromagnet (100) are also ring-shaped.

7. Switchable assembly bearing (1) according to Claim 5 or 6, characterized in that the electromagnet (100) is disposed in a chamber (85) adjacent to the connecting chamber (80) containing the shut-off body (90) and which provides a connection with the compensation chamber (20).

8. Switchable assembly bearing (1) according to one of Claims 4 to 7, characterized in that the shut-off body or sealing ring (90) is made of a magnetic elastomer.

9. Switchable assembly bearing (1) according to one of Claims 1 to 8, characterized in that the additional damping channel (70) is disposed at least in part within the dividing wall (50), between the working chamber (10) and the compensation chamber (20).

10. Switchable assembly bearing (1) according to one of Claims 1 to 9, characterized in that the additional damping channel (70) for decoupling and quenching low-frequency, high-amplitude vibrations is designed for an idling drive assembly.

11. Switchable assembly bearing (1) according to one of Claims 1 to 10, characterized in that there is provided a decoupling device (54) for quenching and damping high-frequency, low-amplitude acoustic vibrations.